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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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08/796,752 02/06/97 ARAI

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WM02/0420

EXAMINER

NGUYEN, P

ART UNIT

PAPER NUMBER

2663

DATE MAILED:

04/20/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

**Office Action Summary**

Application No.

08/796,752

Applicant(s)

ARAI, KOJI

Examiner

Phuongchau Ba Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 4-14-2001 Amendment.
- 2a) ☒ This action is FINAL.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-9, 11, 12, 18 and 19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 3-5, 8, 9, 11 and 12 is/are allowed.
- 6) ☒ Claim(s) 1-2, 6-7, 18-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. § 119**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

**Attachment(s)**

- 15) ☐ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 18) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other: \_\_\_\_\_.

**FINAL ACTION**

***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 18-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 18 and 19 are not clear how "a signal"(at line 4 of claims 18-19) being derived from "said plurality of signals"(at line 2 of claims 18-19). It is confusing because the "plurality of signals"(at line 2 of claims 18-19) were multiplexed to produce "an input signal"(at line 2 of claims 18-19), which is received at a first unit of an apparatus adapted to a radio LAN system. Please clarify the confusion.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-2, 6-7, 18-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art in view of Nishimura et al [5,490,183].

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The admitted prior art discloses in figure 1 a plurality of base stations [1-n] connecting to an ATM hub which is connected to wiring LAN system. These base stations transmit data received from ATM hub to a terminal station in different frequencies [f1-fn].

The admitted prior art does not disclose down converting each signal no more than a frequency which is allocated to said each base station.

Nishimura discloses in figure 1 a data multiplexing and separating circuit 21 connecting to an ISDN system and separating [converting] the signal received from the ISDN system from 64 kbps into plurality signals in lower bit rate [i.e., 11.2 kbps]. These low bit rate signals were provided to data multiplexing and separating circuit 23. "The data multiplexing and separating circuit 23 time divisionally multiplexes the 11.2 kbps digital audio signals provided from the m digital audio signal processing apparatus 22a, 22b,...,22m to transmit to a plurality of base stations 3a-3n {see element 21 in figures 1, 3, 5; col.2, line 9 to col.3, line 22; and col.9, lines 60-67}.

Therefore, it would have been obvious to a skilled artisan to implement the multiplexing and separating circuit 21 in the radio communication line control station of Nishimura into the line between the base stations [1-n] and the ATM hub of the admitted prior art. The motivation is to improve the transmission rate by transmitting data at a low bit rate between the base station and the ISDN system [i.e., ATM] as explicitly suggested by Nishimura in column 1 lines 23-41.

***Allowable Subject Matter***

5. Claims 3-5, 8-9, 11-12 are allowable over prior art of the record.

***Response to Arguments***

6. Applicant's arguments filed 2-14-2001 have been fully considered but they are not persuasive.

AV. Applicants argued in page 5 of the response that the 11.2 kbps signals in Nishimura system are not time-divisionally distributed into at least two signals where each of the signals is sent to the terminal via one of the base station.

In reply, Nishimura does disclose that the 11.2 kbps signals were time divisionally by data multiplexing and separating circuit 23 before transmitting to a plurality of base stations in column 2, lines 25-29.

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phuongchau Ba Nguyen whose telephone number is (703) 305-0093 and available Monday-Friday from 10:00 AM to 3:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau T. Nguyen, can be reached on (703) 308-5340. The fax number for this group is (703)305-9509.

Any inquiry of a general nature or relating to the status of this application should be directed to the group receptionist whose telephone number is (703) 305-4700.

*PR*

P. NGUYEN

April 18, 2001

*Chau T. Nguyen*

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